

Title (en)

CONTROL DEVICE AND CONTROL METHOD FOR INTERNAL COMBUSTION ENGINE

Title (de)

STEUERVORRICHTUNG UND STEUERVERFAHREN FÜR EINEN VERBRENNUNGSMOTOR

Title (fr)

DISPOSITIF DE COMMANDE ET PROCÉDÉ DE COMMANDE POUR MOTEUR À COMBUSTION INTERNE

Publication

**EP 2492474 B1 20151216 (EN)**

Application

**EP 09850542 A 20091019**

Priority

JP 2009067972 W 20091019

Abstract (en)

[origin: EP2492474A1] In a hybrid vehicle including an engine provided with a plurality of VVTs (variable valve timing mechanisms) as one motive power source, an ECU increments a time lapse counter when a sensor detects the fact that a greatest-retard command has been output to all VVTs and an operation position of each VVT has actually returned to a greatest-retard position in response to the greatest-retard command. The ECU determines whether count by the time lapse counter has exceeded a predetermined defined time or not, and it does not permit engine stop until count by the time lapse counter reaches the predetermined defined time and permits engine stop when count by the time lapse counter has exceeded the predetermined defined time.

IPC 8 full level

**F02D 29/02** (2006.01); **B60K 6/445** (2007.10); **F02D 13/02** (2006.01); **F02D 13/08** (2006.01); **F02D 17/00** (2006.01); **F02D 41/04** (2006.01); **F02D 41/00** (2006.01)

CPC (source: EP US)

**B60K 6/445** (2013.01 - EP US); **B60L 1/02** (2013.01 - EP US); **B60L 3/0023** (2013.01 - EP US); **B60L 7/18** (2013.01 - EP US); **B60L 15/20** (2013.01 - EP US); **B60L 15/2072** (2013.01 - EP US); **B60L 50/16** (2019.01 - EP US); **B60L 50/40** (2019.01 - EP US); **B60L 50/61** (2019.01 - EP US); **F02D 13/0215** (2013.01 - EP US); **F02D 13/08** (2013.01 - EP US); **F02D 29/02** (2013.01 - EP US); **F02D 41/042** (2013.01 - EP US); **B60L 2240/421** (2013.01 - EP US); **B60L 2240/423** (2013.01 - EP US); **B60L 2240/441** (2013.01 - EP US); **B60L 2240/443** (2013.01 - EP US); **B60L 2240/445** (2013.01 - EP US); **B60L 2260/26** (2013.01 - EP US); **B60L 2270/145** (2013.01 - EP US); **F02D 17/00** (2013.01 - EP US); **F02D 2041/001** (2013.01 - EP US); **Y02T 10/12** (2013.01 - EP US); **Y02T 10/62** (2013.01 - EP US); **Y02T 10/64** (2013.01 - EP US); **Y02T 10/70** (2013.01 - EP US); **Y02T 10/7072** (2013.01 - EP US); **Y02T 10/72** (2013.01 - EP US)

Citation (examination)

- WO 2007142322 A1 20071213 - TOYOTA MOTOR CO LTD [JP], et al
- JP H07233713 A 19950905 - TOYOTA MOTOR CORP

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